

1206A & 1207A CONFIGURABLE DISTRIBUTION

Input Frequencies 500kHz to 50MHz
100 MHz Option Available
12 Broadband Outputs
Low Additive Phase Noise
Isolation (>100dB typical)
Minimum Skew & Propagation Delay
Pulse and IRIG DCLS
Superior IRIG-B Signal Distribution
High Channel Isolation
Available in 1U & 2U , 19" rack mount package
Low Cost



The **ptf** 1206A (1U) & **ptf** 1207A (2U) provide the flexibility of distributing a variety of signals from one highly configurable box

With **ptf's quad-bloc** distribution cards you can build a system that is tailored to your specific needs. Based on the **ptf** family of Distribution products, **ptf quad-blocs** are available for Broadband RF, Digital, Pulse and Modulated IRIG Distribution. Dual input A/B autoswitching capabilities are also available as an option.



The **ptf Broadband RF Distribution** provides high performance frequency references for laboratory or system use. In most applications the phase noise capability of the **ptf** Broadband RF Distribution will out-perform the input signal performance to such a degree that no additive phase noise will be noticeable on the outputs. Isolation output to output is ~100 dB and harmonics are <-40 dB.

The **ptf Digital Signal Distribution** is a flexible platform used for distribution of various pulse formats (e.g. 1 PPS, 1 PPM, 10 PPM, etc). The **ptf**

Digital Signal Distribution will also distribute digital timing signals such as IRIG-B DCLS format. Through decades of timing design experience, the **ptf** team is able to reproduce precision pulse input signals with the minimum of propagation delays, with two stages of input signal buffering to distribute the input signal to 12 separate outputs and insure maximum isolation between individual output signals.

The **ptf Modulated IRIG Distribution** uses at its heart a broadband design combining the latest technology in low noise components, to distribute modulated IRIG signal input to provide separate outputs.

The **ptf Auto Switch** is purpose designed for time and frequency applications where reliability criteria call for redundant RF, Pulse and timing sources. The unit accepts a pre-configured input consisting of either an RF (sine) signal, a pulse (typically 1 PPS), or Timing (IRIG) signals. The primary signal is monitored and automatically switches to the backup channel within ~ 3msec (typical).



Specifications subject to change without notice



Specifications

ELECTRICAL

RF DISTRIBUTION SPECIFICATIONS

Output

Frequency Range 500kHz to 50MHz
 1 kHz - 20 MHz (optional)
 Level 1V rms (nominal)
 Harmonic Distortion <-40 dB
 Non-Harmonic Signals <-80 dB
 Load Impedance 50 Ω
 Isolation >90 dB*
 Connectors BNC
 *Isolation alternating channels >100 dB, up to 30MHz

Additive SSB Phase Noise

(1 Hz Bandwidth) Offset from 10MHz
 1 Hz -120 dB
 10 Hz -135 dB
 100 Hz -145 dB
 1,000 Hz -155 dB
 10,000 Hz -160 dB

RF Input

Frequency Range 500kHz to 50MHz
 1 kHz - 20 MHz (optional)
 Level 1 V rms (nominal)

Alarm Output

Summary alarm indicates failure of any output signal
 Non-alarm condition: Relay energized (fail safe)
 Connector: 9 pin D-male

DIGITAL DISTRIBUTION SPECIFICATIONS

Input Level 10V max (0-5V nominal)

Output Level 0 - 5V
Output Impedance 50 Ohms
Load Impedance 50 Ohms

Frequency Range 50MHz maximum

Rise Time <2ns

Ch to Ch Skew <5ns (multi-cards), <1ns (1 card)



MODULATED IRIG DISTRIBUTION SPECIFICATIONS

Time Code Input/Output

Code Format IRIG A,B,D,E,G & H
 Modulation Frequency 1kHz to 1MHz
 Modulation Ratio 3:1
 Amplitude 6V P-P into 50 Ohms
 50 Ohm source impedance
 Connectors BNC
 Impedance 50 Ohms

AUTOSWITCH SPECIFICATIONS

Switching Time <3 milli seconds (typical)

Type Relays (Failsafe)

Break before Make

Switch Control Auto/Remote/Local

Controls & Indicators

Power Green LED,
 power is connected

Alarm Red LED,
 signal output failure

ENVIRONMENTAL & PHYSICAL

Temperature: 0° to 55° C

Relative Humidity: 0 to 95%, non-condensing

Power Requirements

AC Input (\pm 15%) 90 - 264 VAC, <10W

DC Input (optional)

Dimensions (HxWxD): 1U x 19" x 12"

Configuration Options

Option #	Description
RF10	1MHz to 10MHz Sinewave out (x4)
RF100	100MHz Sinewave out (x4)
TIME	Time Code Output
PULS	Pulse Distribution (x4)
TELC	T1/E1 Distribution (x4)
AUTO	Auto Switch (Digital, Irig, or RF)
DCPS	DC Power Supply
RSLD	Mounted Rackslides



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